

Anti-Attack Configuration Commands

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Chapter 1 Anti-Attack Configuration Commands

1.1 Anti-Attack Configuration Commands

1.1.1 filter period time

Syntax

To configure the attack checkup period, run the following command. To return to the default setting, use the no form of this command.

filter period *time*

no filter period

Parameters

Parameters	Description
<i>time</i>	Stands for the attack-proof checkup period whose unit is second. If the number of packets transmitted by the attack source exceeds the designated number in the checkup period, the attack source is thought to trigger attacks. Value range: 1-600 second(s)

Default Value

The default time is 10 seconds.

Command Mode

Global configuration mode

Usage Guidelines

None

Example

```
Switch_config# filter period 15
```

Related Command

filter threshold

1.1.2 filter threshold

Syntax

To configure the threshold value which is exceeded before the system thinks an attack, run the following command. Vary your configuration in terms of the packet type. To return to the default setting, use the no form of this command.

filter threshold *type value*

no filter threshold *type*

Parameters

Parameters	Description
<i>type</i>	Packet type, including ARP, BPDU, DHCP, IGMP and ICMP.
<i>value</i>	Stands for the number of the packets received in an attack-proof checkup period before the system thinks it as an attack. Value range: 5-2000

Default Value

The default value is 1000 packets.

Command Mode

Global configuration mode

Usage Guidelines

None

Example

```
Switch_config# filter threshold ip 1500
```

Related Command

filter period

1.1.3 filter block-time value

Syntax

To configure the time to block attack resource, use the filter block-time value command. To return to the default setting, use the no form of this command.

filter block-time *value*

no filter block-time

Parameters

Parameters	Description
<i>value</i>	Stands for the time of blocking the attack source after the attack is detected. Its unit is second. Value range: 1-86400

Default Value

The default value is 300 seconds.

Command Mode

Global configuration mode

Usage Guidelines

None

Example

```
Switch_config# filter block-time 600
```

Related Command

filter period

filter threshold

1.1.4 filter polling period

Syntax

To configure the period of the attack source polling check in the hybrid mode, run the following command. To return to the default setting, use the no form of this command.

filter polling period *time*

no filter polling period

Parameters

Parameters	Description
<i>time</i>	The period of the polling attack after blocking the attack source. Unit: second Value range: 1-600

Default Value

The default time is 10 seconds.

Command Mode

Global configuration mode

Usage Guidelines

None

Example

```
Switch_config# filter polling period 20
```

Related Command

filter polling threshold

filter polling auto-fit

1.1.5 filter polling threshold

Syntax

To configure the filter polling threshold in the hybrid mode, run the following command. Vary your configuration in terms of the packet type. To return to the default setting, use the no form of this command.

filter polling threshold *type value*

no filter polling threshold *type*

Parameters

Parameters	Description
<i>type</i>	Packet type, including ARP, BPDU, DHCP, IGMP and ICMP.
<i>value</i>	The attack source is taken as existed if 1-2000 packets are received within any polling period. Value range: 1-2000

Default Value

The default value is 750 packets.

Command Mode

Global configuration mode

Usage Guidelines

None

Example

```
Switch_config# filter polling threshold ip 1500
```

Related Command

filter polling period

filter polling auto-fit

1.1.6 filter polling auto-fit

Syntax

To configure auto-fit the polling detect period and threshold, run the following command. The command is efficient by default. The polling period equals with the attack filter period and the polling packet threshold equals to 3/4 of the attack filter packet threshold. To return to the default setting, use the no form of this command.

filter polling auto-fit

no filter polling auto-fit

Parameters

None

Command Mode

Global configuration mode

Usage Guidelines

None

Example

```
Switch_config# filter polling auto-fit
```

Usage Guidelines

None

Related Command

filter polling period

filter polling threshold

1.1.7 filter igmp

Syntax

To enable detect ICMP attack, run the following command. To return to the default setting, use the no form of this command.

filter igmp

no filter igmp

Parameters

None

Command Mode

Global configuration mode

Usage Guidelines

None

Example

```
Switch_config# filter igmp
```

Related Command

```
filter enable
```

1.1.8 filter ip source-ip

Syntax

To enable IP attack detection, run this command. To disable IP attack detection, use the no form of this command.

```
filter ip source-ip
```

```
no filter ip source-ip
```

Parameters

None

Command Mode

Global configuration mode and UP interface configuration mode.

Usage Guidelines

The command is efficient when both the global port and the uplink port are configured.

Example

```
Switch_config# filter ip source-ip  
Switch_config# interface g0/1  
switch_config_g0/1# filter ip source-ip
```

Related Command

```
filter enable
```

1.1.9 filter icmp

Syntax

To enable ICMP attack detection, run the following command. To disable ICMP attack detection, use the no form of this command.

filter icmp

no filter icmp

Parameters

None

Command Mode

Global configuration mode and UP interface configuration mode.

Usage Guidelines

The command is efficient when both the global port and the uplink port are configured.

Example

```
Switch_config# filter icmp
Switch_config# interface g0/1
switch_config_g0/1# filter icmp
```

Related Command

filter enable

1.1.10 filter dhcp

Syntax

To enable ICMP attack detection, run the following command. To disable DHCP attack detection, use the no form of this command.

filter dhcp

no filter dhcp

Parameters

None

Command Mode

Global configuration mode and UP interface configuration mode.

Usage Guidelines

The command takes effect in the global configuration mode and the uplink port mode.

Example

```
Switch_config# filter dhcp
Switch_config# interface g0/1
switch_config_g0/1# filter dhcp
```

Related Command

filter enable

1.1.11 filter arp

Syntax

To enable the ARP attack detection, run the following command. To disable ARP attack detection, use the no form of this command.

filter arp

no filter arp

Parameters

None

Command Mode

Uplink port configuration mode

Usage Guidelines

None

Example

```
Switch_config_g0/1# filter arp
```

Related Command

```
filter enable
```

1.1.12 filter bpdu

Syntax

To enable the BPDU attack detection, run this command. To return to the default setting, use the no form of this command.

filter bpdu

no filter bpdu

Parameters

None

Command Mode

UP interface configuration mode

Usage Guidelines

None

Example

```
Switch_config_g0/1# filter bpdu
```

Related Command

```
filter enable
```

1.1.13 filter mode

Syntax

To configure the filter mode, run the following command.

filter mode [raw | hybrid]

Parameters

Parameters	Description
raw	To configure Filter as Raw mode.
hybrid	To configure Filter as Hybrid mode.

Default Value

Hybrid mode

Command Mode

Global configuration mode

Usage Guidelines

None

Example

```
Switch_config# filter mode raw
```

Related Command

filter enable

1.1.14 filter enable

To enable the attack detection function, run this command in global mode. To return to the default setting, use the no form of this command.

filter enable

no filter enable

Parameters

None

Command Mode

Global configuration mode

Usage Guidelines

None

Example

```
Switch_config# filter enable
```

Related Command

None

1.1.15 show filter

To display the working state of the attack-proof function of the current OLT, run this command.

show filter

To display working state of the anti-attack feature of the current OLT, use the show filter command.

show filter summary

Parameters

None

Command Mode

Other modes except the user mode

Usage Guidelines

None

Example

```
Switch#show filter
```

```
Filter threshold: 1000 packet in any 10 seconds
```

```
Filters blocked:
```

Address	seconds	source interface
00a0.0c13.647d	27.0	gigaEthernet 0/2

```
Filters counting:
```

Address	seconds	count	source interface
00a0.0c43.647d	1.84	371	gigaEthernet 0/2

Filters blocked:indicates MAC address of the blocked attack source, blocked time and source interface.

Filters counting:indicates MAC address of the attack source, counting time, the number of the receiving packets and the source interface.